**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) Method for depositing ~~in particular~~ crystalline layers on substrates lying on rotationally driven substrate holders ~~(2)~~ in a process chamber ~~(1)~~, the substrate holders ~~(2)~~ being disposed around the center of a rotationally driven substrate holder carrier, which substrate holders ~~(2)~~ together with the substrate holder carrier ~~(3)~~ form a process chamber base ~~(4)~~, opposite which there is a process chamber cover ~~(5)~~ with a central gas inlet element ~~(6)~~, through which one or more gaseous starting materials are introduced together with a carrier gas into a decomposition zone which is disposed above a heated central region ~~(4')~~ of the process chamber base ~~(4)~~ and is surrounded by a diffusion zone ~~(4")~~, from which the decomposition products transported in the radially outwardly flowing carrier gas stream reach the substrate, characterized in that the central region ~~(4')~~ of the process chamber base ~~(4)~~ is rotationally driven in relation to the substrate holder carrier ~~(3)~~ and the process chamber cover ~~(5)~~ or the gas inlet element ~~(6)~~.

2. (currently amended) Apparatus for depositing ~~in particular~~ crystalline layers on ~~in particular~~ crystalline substrates resting on rotationally drivable substrate holders ~~(2)~~ in a process chamber ~~(1)~~ of the apparatus, the substrate holders ~~(2)~~ being disposed around the rotational center of a rotationally drivable substrate holder carrier ~~(3)~~, which substrate holders ~~(2)~~ together with the substrate holder carrier ~~(3)~~ form a process chamber base ~~(4)~~, opposite which there is a process chamber cover ~~(5)~~ with a central gas inlet element ~~(6)~~, the central region ~~(4')~~ of the process chamber base ~~(4)~~ giving off heat to one or more gaseous starting materials introduced into the process chamber ~~(1)~~ through the gas inlet element ~~(6)~~ as a

result of heating ~~(8)~~, characterized in that the central region ~~(4')~~ of the process chamber base ~~(4)~~ is rotationally drivable in relation to the substrate holder carrier ~~(3)~~ and the process chamber cover ~~(5)~~ or the gas inlet element ~~(6)~~.

3. (currently amended) Method ~~or apparatus~~ according to Claim 1 ~~one or more of the preceding claims or in particular according thereto~~, characterized in that the substrate holders ~~(2)~~ and a center plate ~~(7)~~, which with its surface forms the central region ~~(4')~~, are rotationally mounted on a gas cushion ~~(9, 10)~~.

4. (currently amended) Method ~~or apparatus~~ according to Claim 3 ~~one or more of the preceding claims or in particular according thereto~~, characterized in that ~~the~~ a thermal conductivity of the gas cushion ~~(9)~~ carrying and rotationally driving the center plate ~~(7)~~ can be set by choosing the gas mixture, the gas mixture comprising a gas with a high thermal conductivity and a gas with a low thermal conductivity.

5. (currently amended) Method ~~or apparatus~~ according to Claim 3 ~~one or more of the preceding claims or in particular according thereto~~, characterized in that the center plate ~~(7)~~ consists of graphite, ~~in particular coated graphite,~~ an inert metal, ~~for example molybdenum,~~ ceramic or quartz.

6. (currently amended) Method ~~or apparatus~~ according to Claim 3 ~~one or more of the preceding claims or in particular according thereto~~, characterized in that the center plate rotates in the same direction as or in the opposite direction to the substrate holder carrier.

7. (currently amended) Method ~~or apparatus~~ according to Claim 3 ~~one or more of the preceding claims or in particular according thereto~~, characterized in that the center plate ~~(7)~~ is carried by substrate holder carrier ~~(3)~~.

8. (currently amended) Method ~~or apparatus~~ according to Claim 3 ~~one or more of the preceding claims or in particular according thereto~~, characterized in that the substrate holder carrier ~~(3)~~ comprises more than one part and ~~in particular~~ is held centrally by two clamping plates ~~(11, 12)~~, the center plate ~~(7)~~ lying above ~~the~~ an uppermost of the two clamping plate~~s~~ ~~(11)~~.

9. (currently amended) Method ~~or apparatus~~ according to Claim 3 ~~one or more of the preceding claims or in particular according thereto~~, characterized by a coaxial supply line ~~(19, 20)~~ of the gas streams forming the gas cushions ~~(9, 10)~~.

10. (currently amended) Method ~~or apparatus~~ according to Claim 3 ~~one or more of the preceding claims or in particular according thereto~~, characterized in that the center plate ~~(7)~~ is rotationally driven mechanically~~, in particular~~ by means of a drive shaft or by means of drive wheels.

11. (new) Apparatus according to Claim 2, characterized in that the substrate holders and a center plate, which with its surface forms the central region, are rotationally mounted on a gas cushion.

12. (new) Apparatus according to Claim 11, characterized in that a thermal conductivity of the gas cushion carrying and rotationally driving the center plate can be set by choosing the gas mixture, the gas mixture comprising a gas with a high thermal conductivity and a gas with a low thermal conductivity.

13. (new) Apparatus according to Claim 11, characterized in that the center plate consists of graphite, an inert metal, ceramic or quartz.

14. (new) Apparatus according to Claim 11, characterized in that the center plate rotates in the same direction as or in the opposite direction to the substrate holder carrier.

15. (new) Apparatus according to Claim 11, characterized in that the center plate is carried by substrate holder carrier.

16. (new) Apparatus according to Claim 11, characterized in that the substrate holder carrier comprises more than one part and is held centrally by two clamping plates, the center plate lying above an uppermost of the two clamping plates.

17. (new) Apparatus according to Claim 11, characterized by a coaxial supply line of the gas streams forming the gas cushions.

18. (new) Apparatus according to Claim 11, characterized in that the center plate is rotationally driven mechanically by means of a drive shaft or by means of drive wheels.